Electronic TUBE
KEN-RAD

6AG5
Description and Rating
RADIO-FREQUENCY AMPLIFIER PENTODE

GENERAL DESCRIPTION

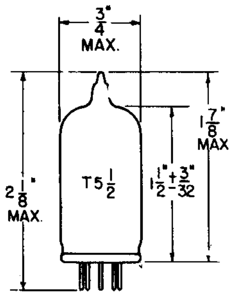
Principal Application: The 6AG5 is a miniature sharp-cutoff pentode designed for use as an intermediate-frequency amplifier or radio-frequency amplifier up to frequencies of approximately 400 megacycles. The tube features high transconductance and low input and output capacitances. The use of two cathode leads facilitates isolation of the input and output circuits and thus minimizes degeneration.

Cathode:	Coated Unipotential
Heater Voltage (A-C or D-C)	6.3 Volts
Heater Current	0.3 Ampere
Envelope:	T-5½ Glass
Base:	E7-1, Miniature Button 7-Pin
Mounting Position:	Any

Direct Interelectrode Capacitances:

	With Shield#	Without Shield	
Pentode Connection			
Grid 1 to Plate (Max)	0.020	0.030	μμf
Input	6.6	6.5	μμf
Output	3.1	1.8	μμf
Triode Connection*			
Grid to Plate	2.5	2.5	μμf
Input	3.6	3.6	μμf
Output	4.3	3.0	μμf

PHYSICAL DIMENSIONS

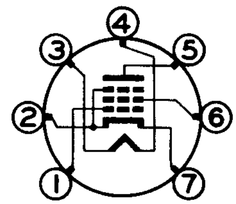


RTMA 5-2

TERMINAL CONNECTIONS

Pin 1 - Grid Number 1
Pin 2 - Cathode, Internal Shield, and Grid Number 3
Pin 3 - Heater
Pin 4 - Heater
Pin 5 - Plate
Pin 6 - Grid Number 2 (Screen)
Pin 7 - Cathode, Internal Shield, and Grid Number 3

BASING DIAGRAM



RTMA 7BD
BOTTOM VIEW

MAXIMUM RATINGS

DESIGN CENTER VALUES:

	Triode Connection*	Pentode Connection	
Plate Voltage	300	300	Volts
Screen Supply Voltage	---	300	Volts
Screen Voltage	---	150	Volts
Positive D-C Grid Number 1 Voltage	0	0	Volts
Plate Dissipation	2.5	2.0	Watts
Screen Dissipation	---	0.5	Watt
Heater-Cathode Voltage	90	90	Volts

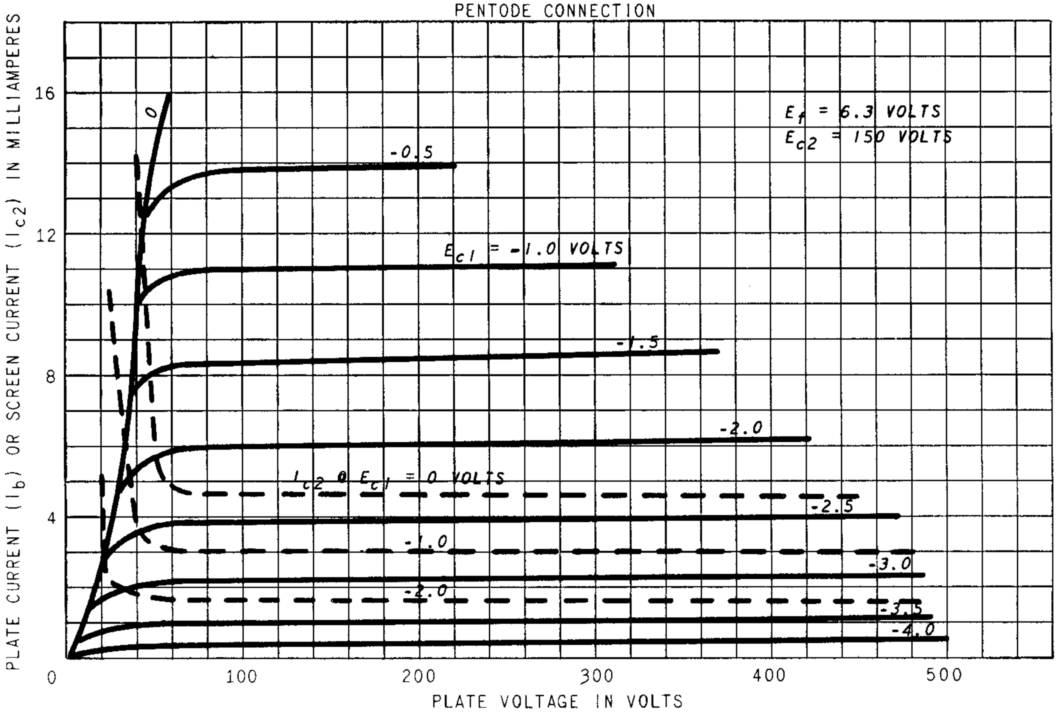
CHARACTERISTICS AND TYPICAL OPERATION

CLASS A_1 AMPLIFIER

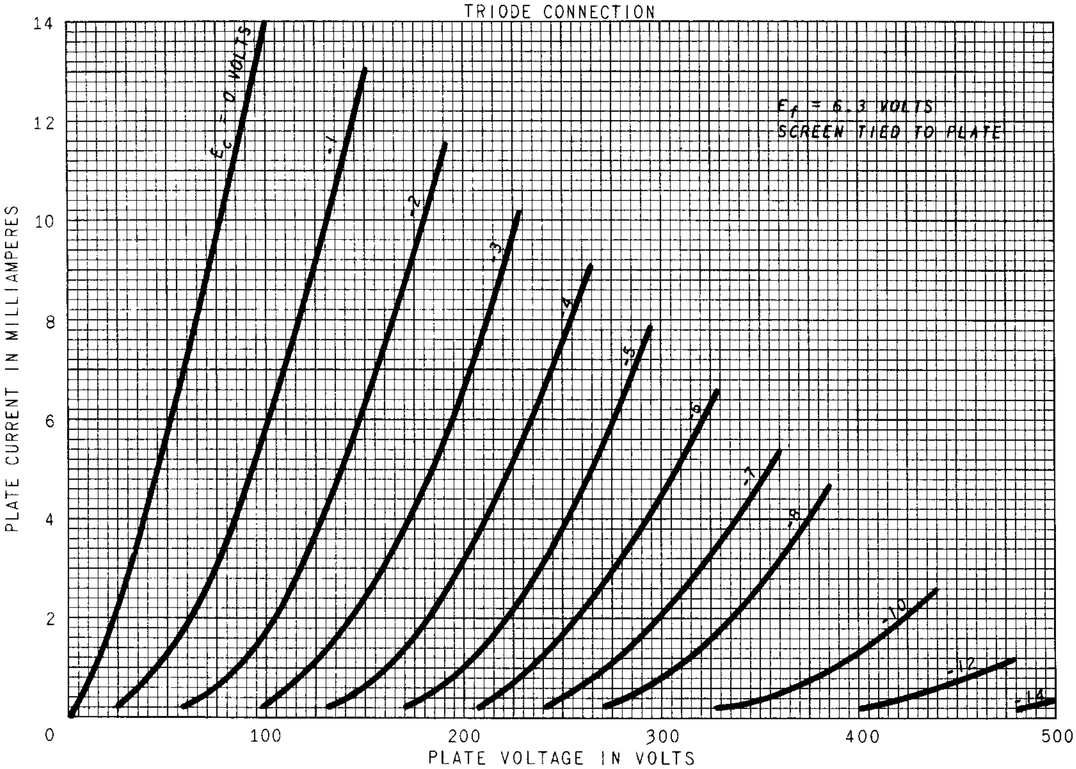
	Triode Connection*		Pentode Connection			
Plate Voltage	250	180	100	125	250	Volts
Screen Voltage	---	---	100	125	150	Volts
Cathode Bias Resistor	820	330	180	100	180	Ohms
Amplification Factor	42	45	---	---	---	
Plate Resistance (Approx)	0.01	0.008	0.6	0.5	0.8	Megohm
Transconductance	3800	5700	4500	5100	5000	Micromhos
Plate Current	5.5	7.0	4.5	7.2	6.5	Milliamperes
Screen Current	---	---	1.4	2.1	2.0	Milliamperes
Grid Number 1 Voltage (Approx) for I_b = 10 Microamperes	---	---	-5	-6	-8	Volts

With external shield #316 connected to pin 7
** For triode connection, connect grid 2 to plate.*

AVERAGE PLATE CHARACTERISTICS
PENTODE CONNECTION



AVERAGE PLATE CHARACTERISTICS
TRIODE CONNECTION



Tube Divisions, Electronics Department

GENERAL ELECTRIC

Schenectady, N. Y.